

$$15) f(x) = \frac{2}{x^2 - 3x + 2} = \frac{2}{(x - \frac{3}{2})^2 - \frac{1}{4}}$$

$$D: (-\infty, 1) \cup (1, 2) \cup (2, \infty)$$

$$x = \frac{3}{2}: (-\infty, \frac{1}{2}) \cup (-\frac{1}{2}, \frac{1}{2}) \cup (\frac{1}{2}, \infty)$$

$$(x - \frac{3}{2})^2: [0, \frac{1}{4}) \cup (\frac{1}{4}, \infty)$$

$$(x - \frac{3}{2})^2 - \frac{1}{4}: [\frac{1}{4}, 0) \cup (0, \infty)$$

$$\frac{1}{(x - \frac{3}{2})^2 - \frac{1}{4}}: (-\infty, -4] \cup (0, \infty)$$

$$\frac{2}{(x - \frac{3}{2})^2 - \frac{1}{4}}: (-\infty, -8] \cup (0, \infty)$$

$$x^2 - 3x + 2 = 0$$

$$(x - 2)(x - 1) = 0$$

$$x \neq 2, 1$$

~~$$x^2 - 3x + 2 = 0$$~~

$$x^2 - 3x + \frac{9}{4} + 2 - \frac{9}{4}$$

$$(x - \frac{3}{2})^2 - \frac{1}{4}$$